Alternative J
East-Side Conveyance

Overview

This alternative will relocate export diversions to a new screened intake on the Sacramento River between Hood and Freeport. A new isolated conveyance facility will transport water around the east side of the Delta to the existing south Delta pumping plants. This facility will reduce fish entrainment and improve water quality for export users. Extensive habitat restoration throughout the Bay-Delta system will provide additional improvements in ecosystem quality. Extensive levee improvements will reduce system vulnerability, and extensive source controls will improve water quality.

New diversion and conveyance move water around the Delta

Currently, limitations on fish entrainment (take limits) are set to avoid jeopardizing fish populations. When these limits are approached, diversions are curtailed or stopped, creating a high degree of uncertainty for water users. If water project diversions are relocated to less sensitive locations and screened to protect fish, entrainment will be reduced and fish populations will increase. Reduced entrainment will provide greater water supply reliability.

New diversion location protects fish

The SWP and CVP diversions will be relocated from the South Delta to the Sacramento River between Hood and Freeport. The new diversion will be equipped with state of the art fish screens and operated using real time monitoring to minimize entrainment of fish. A new canal, which will be isolated from the Delta, will be constructed to convey water from the new diversion to the existing Banks and Tracy Pumping Plants. The isolated facility will be sized to provide water service to many users in Sacramento County, San Joaquin County and the Bay Area as well as the CVP and SWP. While the new diversion location will improve water quality for most users, certain Bay Area users may find this water quality unacceptable. The conveyance facility will include siphons under all important stream courses to prevent disruption of water quality and aquatic habitat values in the streams.

Diversions moved to the Sacramento River and connected to the existing pumps with a new canal

This alternative will extensively restore habitat upstream of the Delta in the Sacramento and San Joaquin systems by constructing meander belts on the Sacramento and restoring channel features on the San Joaquin to improve spawning success and survival of anadromous fish. Extensive habitat restoration in the Delta will include improvement of shallow riverine and riparian habitats to improve conditions for Delta native and anadromous fish. Extensive levee improvements will incorporate habitat restoration. Substantial shallow tidal habitat will be developed near Suisun Bay to benefit migrating salmon and provide spawning and rearing areas for Delta smelt. Ecosystem restoration actions will be guided by a strategy of adaptive management.

Extensive habitat restoration upstream, in the Delta, and in Suisun Bay

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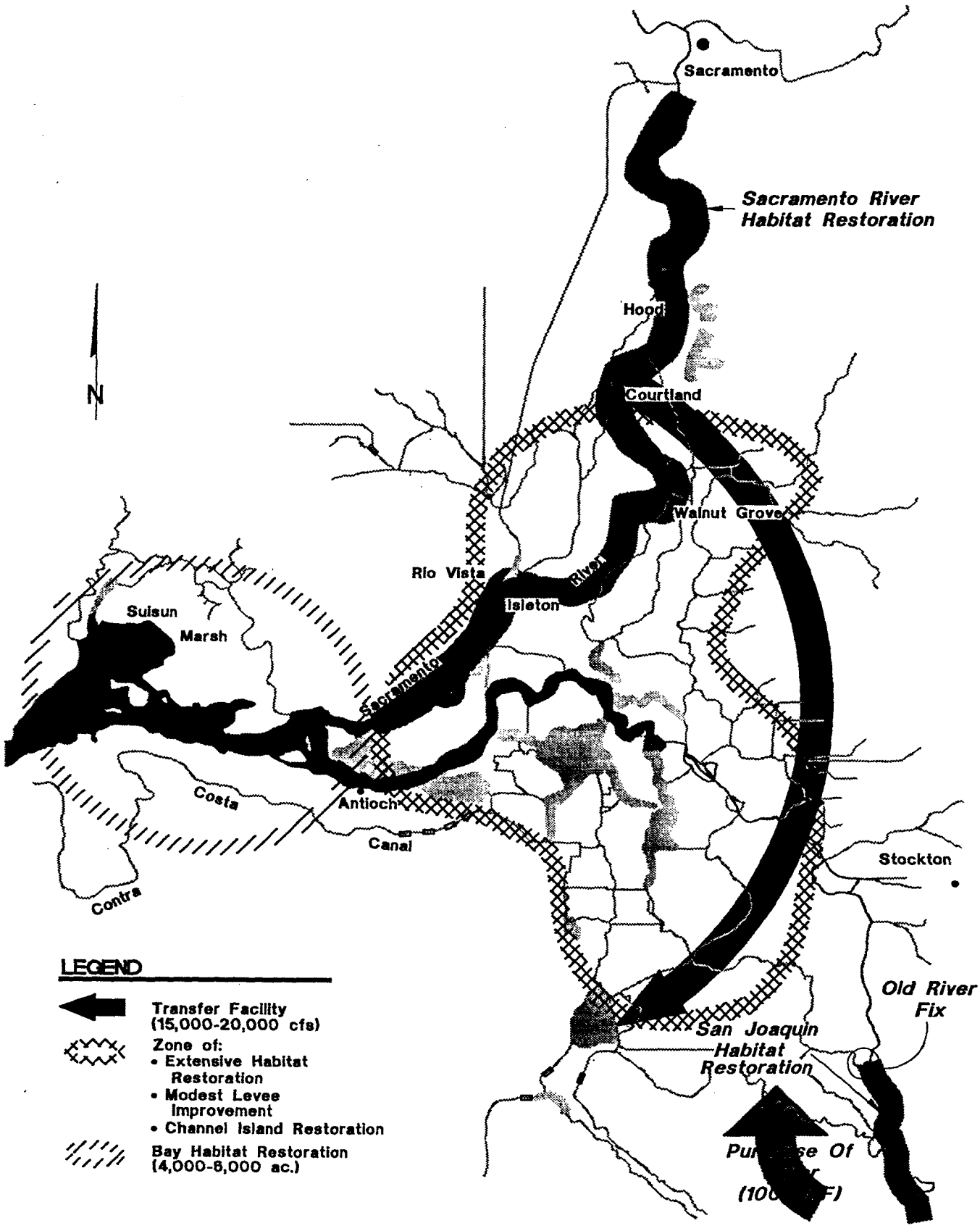

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CALFED BAY-DELTA PROGRAM

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With the SWP and CVP diversions relocated, inflow to the central and south Delta will be reduced, threatening water quality in these areas. A supplemental water supply purchased from San Joaquin River Basin water users or developed in the San Joaquin basin will increase the flexibility of environmental releases of water, protecting water quality in the central and south Delta while improving fish transport through the Delta.

Additional flow will protect water quality and improve fish transport

The vulnerability of the Bay-Delta system will be reduced through implementation of a comprehensive Delta Protection Plan. The plan will guide the stabilization or improvement of certain Delta levees to increase protection, the maintenance of levees, and implementation of an emergency response program to address levee failure. Under this alternative, stabilization of levees would receive modest emphasis, while maintenance and emergency response would receive high emphasis.

Comprehensive Delta Protection Plan

This alternative establishes a long-term drought water bank and provides incentives for additional land fallowing during drought years to improve supply reliability. Demand management, changes in operation of upstream storage, expanded conjunctive use, and groundwater banking will improve operational flexibility and will further reduce fish entrainment by providing more Delta flow in the spring (February-June) period. Moderate levels of demand management including water conservation, water reclamation, and land retirement will be used to reduce water shortages for existing water users and provide some additional Delta outflow during drier years.

Water banks and improved demand management help balance supply and demand

Delta and tributary water quality will be improved through aggressive source control efforts to reduce and manage discharges from agricultural operations and urban areas throughout the Bay-Delta system. Enforcement of source control regulations will be expanded and implementation of Best Management Practices for salinity and pesticide residues will be recommended (e.g., retention of agricultural drainage). Retirement of marginally productive agricultural lands that contribute substantially to instream water quality problems in the San Joaquin River will be expanded through purchases from willing sellers. A variety of actions will be studied and implemented to reduce adverse effects of salinity in San Joaquin inflow, to maintain water levels and circulation in south Delta channels, and to reduce the recycled salt load to the San Joaquin Valley.

Aggressive pollutant source control improves water quality

A new diversion point and isolated conveyance reduce fish entrainment, improve water quality for export users, and increase water supply reliability. Extensive habitat restoration, incorporating levee rehabilitation, improves ecosystem quality while reducing system vulnerability and improving water quality.

Actions provide multiple benefits

Potential Sequencing

Stage 1. Implementation would begin with the core actions.

Core actions

Stage 2. Actions implemented during Stage 2 of this alternative will include establishment of a permanent drought water bank, a moderate demand management program, groundwater banking and conjunctive use, high priority habitat restoration actions, and installation of high priority fish screens. Implementation of a comprehensive Delta protection plan will begin. Additional San Joaquin River water (100 TAF) will be developed or acquired for environmental uses. Stage 2 will include retirement of approximately 70,000 to 100,000 acres of marginally productive agricultural lands in the San Joaquin Valley.

Demand management and high priority habitat and levee improvements, meander belts

Stage 3. In stage 3, a variety of actions will be studied and implemented in south Delta channels to reduce adverse effects of salinity in San Joaquin River inflow and to maintain water levels and circulation. Moderate priority, habitat restoration actions, and fish screen installations will be implemented. Stabilization of levees would receive modest emphasis, while maintenance and emergency response would receive high emphasis. Additional source controls for water quality improvement will be implemented. Work will begin on Sacramento River meander belts.

Moderate level of habitat and levee improvements

Stage 4. In stage 4, the screened diversion on the Sacramento River and the isolated conveyance facility for Delta diversions will be constructed. Work will continue on meander belts.

Large isolated facility

Stage 5. During stage 5, additional habitat restoration actions and additional fish screen installations will be completed at an extensive level of implementation. Meander belts on the upper Sacramento River will be completed. Some increased flows to improve water quality complete this alternative.

Extensive habitat and levee improvements

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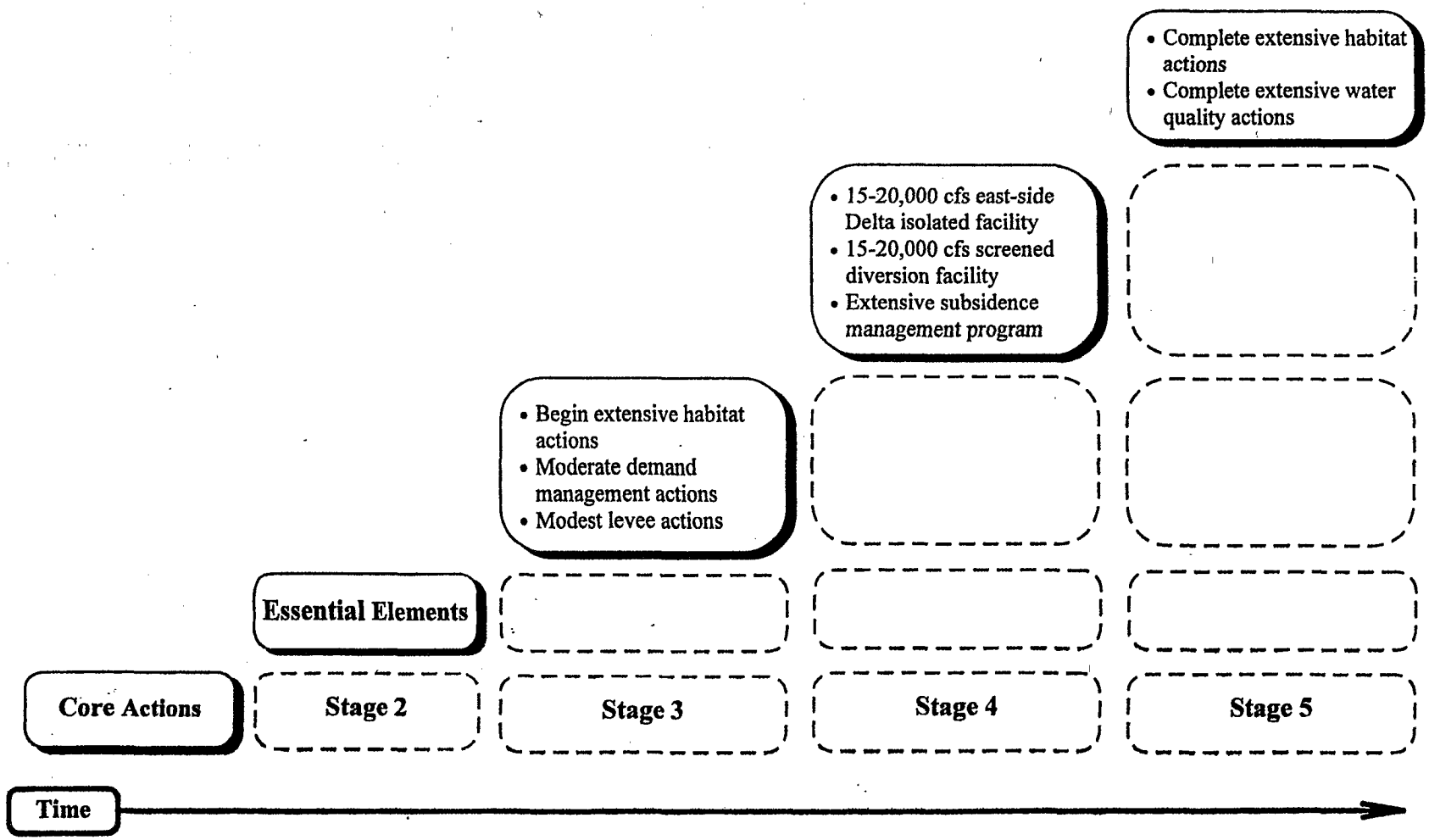
Potential Sequencing



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